

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Previously Amended) A build-up mold for continuous casting comprising:
 - a cooling plate having a back surface with a plurality of slit grooves for passing a cooling fluid, each one of said plurality of slit grooves having a depth and a width;
 - a supporting panel configured to cover said plurality of slit grooves so as to form a plurality of cooling channels; and
 - at least one tightening member for attaching said supporting panel to said back surface,
 - wherein each one of said cooling channels is separate, distinct, and unconnected from, and has substantially the same depth as, the other cooling channels, and said width varies based on a localized cooling requirement for said tightening member.
2. (Previously Amended) The build-up mold for continuous casting as set forth in Claim 1, wherein a ratio of a maximum value of said width to a minimum value thereof is between 1.1 and 4.

3. (Previously Amended) The build-up mold for continuous casting as set forth in Claim 1 or 2, wherein a pattern of said plurality of slit grooves is roughly symmetrical with respect to a centerline of said cooling plate.

4. (Previously Amended) The build-up mold for continuous casting as set forth in any one of Claims 1 or 2, wherein each one of said plurality of slit grooves is disposed at said cooling plate in a wave pattern so as to have a plurality of portions having a curvature, wherein the width of a slit groove having a large curvature is larger than the width of a slit groove having a small curvature.

5. (Currently Amended) The build-up mold for continuous casting as set forth in any one of Claims 1 or 2, wherein a velocity and/or a pressure drop of said cooling fluid in one of said cooling ~~[[channel]]~~ channels is substantially the same as the velocity and/or the pressure drop in the other cooling channels for a given overall velocity or a given overall pressure drop in said build-up mold.

6. (New) A build-up mold for continuous casting comprising:
a cooling plate having a back surface with a plurality of slit grooves for
passing a cooling fluid, each one of said plurality of slit grooves having a depth
and a width;

a supporting panel configured to cover said plurality of slit grooves so as
to form a plurality of cooling channels;

at least one tightening member for attaching said supporting panel to said back surface,

wherein each one of said cooling channels is distinct and unconnected from, and formed separately and the depths of said cooling channels are formed to be substantially equivalent to each other, and the widths of said slit grooves disposed so as to bypass in the vicinity of said tightening members are formed to be larger than the widths of the slit grooves disposed in a zone having high cooling efficiency between said tightening members; and

wherein a radius of curvature of each one of said cooling channels is not equal to the radius of curvature of said tightening members.

7. (New) The build-up mold for continuous casting as set forth in Claim 6, wherein a ratio of a maximum value of said width to a minimum value thereof is between 1.1 and 4.

8. (New) The build-up mold for continuous casting as set forth in Claim 6, wherein a pattern of said plurality of slit grooves is roughly symmetrical with respect to a centerline of said cooling plate.

9. (New) The build-up mold for continuous casting according to Claim 6, wherein at least one of a velocity and a pressure drop of said cooling fluid in each one of said cooling channels is formed so as to be a given overall velocity or a given overall pressure drop.

10. (New) A build-up mold for continuous casting comprising:
a cooling plate having a back surface with a plurality of slit grooves for
passing a cooling fluid, each one of said plurality of slit grooves having a depth
and a width;
a supporting panel configured to cover said plurality of slit grooves so as
to form a plurality of cooling channels;
at least one tightening member for attaching said supporting panel to
said back surface,
wherein each one of said cooling channels is distinct and unconnected
from and formed separately, and the depths of said cooling channels are
formed to be substantially equivalent to each other and the widths of said slit
grooves disposed so as to bypass in the vicinity of said tightening members are
formed to be larger than the widths of the slit grooves disposed in a zone
having high cooling efficiency between said tightening members; and
wherein said slit grooves disposed on said cooling plate are of a slalom
type that is formed so as to have a plurality of portions having a given
curvature, and the widths of slit grooves having a large curvature is formed to
be larger than the widths of slit grooves having a small curvature.

11. (New) The build-up mold for continuous casting as set forth in
Claim 10, wherein a ratio of a maximum value to said width to a minimum
value thereof is between 1.1 and 4.

12. (New) The build-up mold for continuous casting as set forth in Claim 10, wherein a pattern of said plurality of slit grooves is roughly symmetrical with respect to a centerline of said cooling plate.

13. (New) The build-up mold for continuous casting as set forth in any one of Claim 10, wherein a velocity and/or a pressure drop of said cooling fluid in each one of said cooling channels is formed so as to be a given overall velocity or a given overall pressure drop.